

IMPERIAL CANCER RESEARCH FUND.

THE annual meeting of the general committee of the Imperial Cancer Research Fund was held at Marlborough House, on Monday, July 1st, H.R.H. the PRINCE OF WALES presiding. Among those present were Sir William Church, Sir Richard Douglas Powell, Mr. Henry Morris, Sir Henry R. Swanzy, Sir Henry Howse, Sir John McFadyean, Dr. John Tatham, Dr. Rose Bradford, Mr. H. T. Butlin, Mr. W. Watson Cheyne, Mr. Ludwig Neumann, Mr. S. Neumann, Mr. Edmund Owen, Mr. H. J. Stiles, Dr. E. F. Bashford (General Superintendent of Research), Dr. J. A. Murray, Dr. Haaland, Sir Julius Wernher, and Sir C. Morrison Bell. The Secretary, Mr. F. G. Hallett, announced that Mr. Arthur Balfour, Sir William Broadbent, Lord Strathcona, Mr. H. L. Bischoffsheim, Mr. Astor, Adeline Duchess of Bedford, Lady Leconfield, Lord Rothschild, and Sir Thomas and Lady Glen-Coats had written expressing their regret at their inability to be present.

REPORT OF EXECUTIVE COMMITTEE.

The annual report of the Executive Committee rehearsed the proceedings of the fifth meeting of the General Committee, held on July 25th, 1906, under the presidency of Lord Strathcona. The General Superintendent took part in a discussion on cancer at the annual meeting of the British Medical Association held in Toronto last August. He subsequently proceeded to the United States and visited many of the important laboratories, including the Rockefeller Institute, in which cancer investigation is being carried out.

In September Dr. Bashford also attended, as the representative of the Imperial Cancer Research, the German International Cancer Congress held in Heidelberg and Frankfurt, of which he was elected one of the Honorary Presidents. Whilst in Germany he was able to obtain a valuable interchange of views with Professor Ehrlich and others engaged in the investigations on cancer.

Since that meeting a communication had been received from some of the German representatives proposing the establishment of a permanent international conference on cancer, and forwarding an outline scheme of organization, with its head quarters in Berlin. The General Superintendent was asked to organize a British branch and to become one of the representatives, but he was of opinion that at present little advantage was to be gained by such a conference, and that pending more exact knowledge of the etiology of cancer, more good would be obtained by encouraging active individual intercourse and exchange of material between those investigators who were actually studying cancer in the laboratories of different countries. With that view the Executive Committee fully concurred, and in pursuance of this policy the General Superintendent provided material for investigation to many other workers, both at home and abroad, amongst whom were mentioned Dr. Monckton Copeman, F.R.S., and Dr. Hake; Dr. Twort, London Hospital Pathological Department; Dr. Lazarus-Barlow, Middlesex Hospital Cancer Department; Professor Uhlenhuth, Imperial Ministry of Public Health, Berlin; Professor Ranzi and Professor Exner, Vienna; Professor Ascoli, Padua; Professor Czerny and Professor von Dungern, Institute of Cancer Research, Heidelberg; Professor Ritter, Greifswald; Professor Jensen, Copenhagen; Professor Goldmann, Freiburg; and Dr. Powell White, Cancer Research of University of Manchester.

The staff of workers in the laboratory had received a valuable accession in Dr. Magnus Haaland, who previously held the appointment of Assistant in the Pathological Institute of the University of Christiania, and had conducted important researches on cancer under Professor Borrel in the Institute Pasteur and also under Professor Ehrlich, Director of the Royal Prussian Institute of Experimental Therapeutics, and with Professor Harbitz, Christiania, and with Professor Aschoff, Director of the Pathological Institute, University of Marburg.

The General Superintendent and staff had been continuously engaged in laboratory investigation, and a considerable number of new facts had been ascertained. They were not, however, yet ripe for publication in the form of a third scientific report. The progress of the investigations was recorded in the papers from the laboratory, which had been communicated to scientific

journals and societies since the appearance of the second scientific report—namely:

Einige Ergebnisse der experimentellen Krebsforschung (*Berl. klin. Woch.*, No. 46, 1905).

Einige Bemerkungen zur Methodik der experimentellen Krebsforschung (*ibid.*, No. 16, 1906).

On the Occurrence of Heterotypical Mitoses in Cancer (*Royal Society Proceedings*, 1906).

Are the Problems of Cancer Insoluble? (*Lancet*, and *BRITISH MEDICAL JOURNAL*, December 9th, 1906).

Experimental Analysis of the Growth of Cancer (*Royal Society Proceedings*, May, 1906).

L'Etat actuel de la question du Cancer (*Revue Scientifique*, Juin 2 et 9, 1906).

Illustrations of Propagated Cancer (*BRITISH MEDICAL JOURNAL*, May 26th, 1906).

Imperial Cancer Research Fund, London (*La Science au XXme Siècle*, November, 1906).

The Investigations of the Imperial Cancer Research Fund (*British Medical Association*, Toronto, 1906).

Real and Apparent Differences in the Incidence of Cancer (*Transactions of the Epidemiological Society of London*, January 18th, 1907).

Carcinoma Mammæ in the Mouse (*Lancet*, March 23rd, 1907).

The Natural and Induced Resistance of Mice to the Growth of Cancer (*Royal Society Proceedings*, 1907).

The Application of Experiment to the Study of Cancer (*Science Progress*, July, 1907).

Zahl und Grössenverhältnisse der Chromosomen bei *Lepidostiren paradoxa* Fitz (*Anatomischer Anzeiger*, Band xxix, 1906).

Quelles épreuves scientifique a-t-on aujourd'hui de la nature parasitaires des réoplasies, spécialement du Cancer? (XV Congrès International de Médecine, Lisbon, 1906).

Classification des Sarcomes (*ibid.*).

Die experimentelle Analyse des Carcinomwachstums.

(*Zeitschrift für Krebsforschung*, 1907).

A grant of money had been made to Mr. W. Sampson Handley towards the expenses of an investigation into the mode of growth and dissemination of cancer of the stomach. The Museum of the Royal College of Surgeons had been provided with a series of preparations showing the growth of cancerous tumours in mice, with a complete series of histological preparations illustrative of their development. The Government of Cape Colony had forwarded an important report of a Committee of the House of Assembly appointed to investigate certain reputed cancer cures, principally consisting of herbal remedies. The report was in accordance with the experience of the Fund that the claims made on behalf of such remedies, when thoroughly and impartially investigated, could not be substantiated. Since the last general meeting, Dr. Sidney Martin, F.R.S., had been re-elected a member of the Executive Committee by the Royal College of Physicians. Sir John Tweedy and Mr. Edmund Owen had been elected by the Council of the Royal College of Surgeons to fill the vacancies on the Committee occasioned by the expiration of Mr. John Langdon's period of office on the council, and by Mr. Henry Morris becoming *ex-officio* a member of the Committee in virtue of his appointment as President of the Royal College of Surgeons, whilst Mr. Henry T. Butlin was also re-elected a member of the Committee by that College. Dr. Rose Bradford was again nominated by the Royal Society as their representative on the Committee. The Committee once more expressed its appreciation of valuable services rendered by the Foreign, Colonial, and India Offices in obtaining and forwarding information relating to cancer throughout the Empire.

In December the Committee received from one of the vice-presidents, Mr. H. L. Bischoffsheim, an intimation that he intended to give a donation of £40,000 in commemoration of his golden wedding. This munificent gift, which was warmly acknowledged by the Committee, was particularly gratifying as evidence of the confidence felt by the donor in the efforts being made by systematic scientific investigation to arrive at a more exact knowledge of the nature, causes, and treatment of cancer.

GENERAL SUPERINTENDENT'S REPORT.

In his report Dr. Bashford said the wide range of research had been maintained as in previous years, but the hopes of advancing knowledge of cancer had become more and more centred in experimental investigations. The experiments on living animals continued to be controlled and the results supported by comparative biological and statistical investigations. During the past year they

had learnt from experiments more of the nature of the local and of the constitutional conditions associated with the origin of cancer, and they had been able to form more definite conceptions of the nature of the change responsible for the rapid multiplication of cancer cells.

The thanks of the Executive Committee were again due to the Foreign, India, and Colonial Offices for the continued incentive given to the collection of data within the areas under their jurisdiction, as well as to the Governments of India, Egypt, Cape Colony, Natal, and other dependencies.

The statistical investigations had been continued in the London and provincial hospitals, in India and in various Colonies and Protectorates. During the past year 1,282 fresh cases had been reported from the London hospitals and 392 from provincial hospitals.

Of 1,806 cases of cancer which up till now had been reported from India, in 1,513 persons cancer affected the surface of the body, and only in 76 affected internal organs; 335 occurred in persons living on a vegetable diet, and 608 in persons living on a mixed diet, mainly flesh. Isolated reports had been forwarded by individual investigators, from India, from the Colonies, and from the Protectorates, to which full justice would be done when the statistics of the ethnological distribution of cancer are considered in detail. Reports of careful investigations had been forwarded from Natal by Dr. Watkins Pitchford, from Tasmania by Dr. I. G. L. Elkington, from Ceylon by Sir A. Perry and Dr. Chalmers, from Egypt by Dr. Keatinge and Professor Ferguson, from Kashmir by Dr. Neave and Dr. Rawlence, and from Basutoland by Dr. Long.

Statistical investigations had arrived at a point at which experiment had become essential in order to solve definite problems relating to the incidence of cancer, which statistics alone were unable to decide. Up to the present the investigations had revealed very considerable differences in the numbers of cases recorded in various races of mankind. Some of these differences were only apparent; to determine whether or not others were real required more prolonged investigation, for example, as to the longevity of the inhabitants of Tasmania, which might possibly account for the fact that cancer of the lip was so very frequent in the returns from that Colony.

Although a basis for accurate statistical comparison was still wanting, it was of interest to find that the incidence of cancer as recorded for different sites of the body varied, so that cancer of particular sites preponderated in the records and specimens of the cases of cancer forwarded from particular regions. Thus, melanotic sarcoma in the native races of Africa had been frequently reported, and always as arising on the soles of the feet. For India the returns referred mainly to the surface of the body, and in the case of Kashmir, epithelioma of the anterior abdominal wall occurred with a constancy met with nowhere else. The limited anatomical distribution of the disease in other native races—for example, in Mohammedans, Tamils, and Cingalese—was well illustrated in a special report from Ceylon.

Peculiar forms of local chronic irritation, associated with native customs or religious rites, were reported to affect portions of the body corresponding to the sites on which the majority of the cancers were recorded. The development of cancer in tissues which had suffered direct injury—for example, fracture of bone—illustrated the same relationship as did the development of cancer in tissues which had long been the seat of chronic disease of recognized infective nature—for example, some forms of keratosis linguae and lupus.

Cancer was universal in vertebrate animals which, while escaping the effects of many of the chronic forms of irritation affecting man, suffered from other external irritants. No one form of external agency was constantly associated with the development of cancer. Since there was still no evidence necessitating or even justifying the assumption that the disease is communicated from one person to another, the search for the clue to cancer in any one species of animal must take account of possible peculiarities in the individual beings attacked and in those which escaped. Hence the questions of individual and of family liability had received still greater attention during the past year.

Dr. William Ogle, in the Registrar-General's report for 1889, stated that 1 out of 21 men and 1 of 12 women

reaching the age of 35 eventually died of cancer. From Dr. Tatham's most recent figures of national mortality in the Registrar-General's report for 1905, it had been calculated by using Dr. Ogle's method that, on an average, the chance that a man who reached the age of 35 would eventually die of cancer was 1 in 12, and the chance that a woman who reaches the same age will eventually die of cancer was 1 in 8. The chances of dying of cancer for the two sexes, as calculated from the national figures were therefore approximately: It was unprofitable to discuss the question of the real or apparent increase of cancer, until the additional data which, with Dr. Tatham's collaboration, were accumulating, justified this being done. It was to be noted, however, that cancer as a cause of illness was rare when compared with the frequency of illness from infective diseases which were important causes of death, for example, tuberculosis, pneumonia, enteritis. This was due to the exceptionally high case-mortality of cancer, so that the number of deaths represented very nearly the total number of cases observed. The following table showed how often, taking the above proportions, no death, or one, two, three, etc., deaths from cancer might be expected to be recorded in 100 families, half the numbers of which are men and half women, no hereditary tendency being assumed, and excluding all persons dying under 35:

Number of Cancer Deaths in Family.	Per 100 Families of 6 Members, namely, 3 Men, 3 Women.	Per 100 Families of 8 Members, namely, 4 Men, 4 Women.	Per 100 Families of 10 Members, namely, 5 Men, 5 Women.
None	51	41	33
One	36	39	39
Two	11	16	20
Three or more ...	2	4	8
	100	100	100

The frequency of cancer as a cause of death was so great that few families of large size escaped. Nevertheless, it played but an insignificant part as a cause of mere illness compared with diseases of known infective nature. Were detailed analyses practicable of the incidence of cancer in a large number of families, and if they showed great variations above and below the average given in the preceding table, the probable existence of a family susceptibility would be enhanced. In man such an analysis was impracticable because of the length of life and low fecundity, and because of the progressive alteration in the value to be attached to records of the occurrence of cancer. Resort to experiments was necessary in order to define more accurately the circumstances associated with the spontaneous appearance of cancer.

The difficulty could be obviated in the case of short-lived animals. In the mouse it was now in a fair way to a definite settlement by means of breeding and in-breeding experiments on a large scale. As in man, so in the mouse, the total number of cases of cancer occurring in different strains varied. The disease had been so frequent as to lead some observers to assert the occurrence of epidemics in certain cages. Their prolonged investigations had given no support to this interpretation of the apparent greater frequency of cancer in some communities of mice as compared with others. The surgical removal of spontaneously-occurring tumours had enabled them to prolong the life of many mice and to breed from them. In that way they had obtained mice of a known cancerous parentage. By successively crossing other spontaneously-affected animals with the offspring of cancerous parents, strains were being obtained in which the cancerous heredity was $\frac{1}{2}$, $\frac{1}{4}$, or $\frac{1}{8}$, and even higher. This concentration of a hypothetical hereditary factor in a known amount, and in large numbers of animals of known age, should in the course of a few years definitely settle whether there was a family or only an individual liability to the disease. At the same time mice of known cancerous stock might be indispensable to further attempts to produce cancer experimentally—for example, by the artificial application of external agencies having a mediate relation to its spontaneous appearance. All attempts to produce cancer experimentally had thus far failed in animals chosen at random. They had frequently

pointed out the origin of cancer was something entirely different from its continued growth either in spontaneously attacked or in inoculated animals. The resemblance between the continued growth of spontaneous and of inoculated cancer was, however, very close. The origin of cancer must be studied in spontaneous cases. Other experimental investigations had been conducted by Drs. Murray and Haaland and Mr. Bowen along the same lines as heretofore, with results confirming and extending those already recorded. Those meriting special attention still referred to cancer in mice. Forty-eight additional spontaneous tumours in mice had been added to those previously studied. The tumours successfully propagated now numbered forty, and included two fresh groups (certain carcinomata). Dr. Murray, Dr. Haaland, and Mr. Bowen had now propagated haemorrhagic tumours with a degree of success surpassing that previously obtained. These tumours were the most frequent form of cancer in the mouse. The experiments yielded further evidence that the growth of cancer consisted of a succession of phases of increased and diminished energy of assimilation and growth. As regards animals naturally suffering from cancer, it had been shown that the continuation of growth was only exceptionally obtained when their tumours were transplanted either into themselves or into other animals naturally suffering from cancer. The results spoke for a greater suitability of the soil provided by individual mice, but not for a greater suitability on the part of all mice which were naturally the victims of cancer. Mouse cancer could not be grown in animals of different species. Attempts to cultivate tumour cells outside the body, even in the organic fluids of the mouse, had proved fruitless, and it was only in the responsive living environment of the mouse's body that the vitality and peculiar energies of the tumour cells manifested themselves. This response was partly local and partly general. The local reaction consisted in furnishing the vascular and supporting structures necessary to convey the food supply. One aspect of the general response, first observed by them, in collaboration with Dr. Cramer, had been investigated by Dr. Monckton Copeman, F.R.S., and Dr. Hake on the stomachs of 700 mice supplied from the laboratory. They had demonstrated that the cancer cell, growing in a previously normal mouse, induced an increase in the amount of physiologically active hydrochloric acid during digestion. This increased digestive activity was necessary to furnish foodstuffs for the rapid building up of protoplasm in the tumour which developed. It was a remarkable fact, throwing a most instructive light upon the relations subsisting between the transplanted tumour and the normal animal, that a fragment or tissue no bigger than a pin's head at the time of its introduction was able to influence the whole economy of the normal animal in this way. It was at least probable that the continued growth of spontaneous tumours stood in the same relation to the tissues of the mice attacked. Should the compensatory increase in digestive activity be insufficient, as in young animals, the general nutrition suffered, and an analogous relation might explain certain cachectic states occasionally met with in mice spontaneously attacked.

It had now been amply demonstrated that the soil was rendered unsuitable for growth, (a) when a mouse had recovered from a previous successful inoculation of cancerous tissue of its own species, (b) when previous inoculation had not been successful, but had led to the absorption of cancerous tissue, (c) after a previous inoculation of normal mouse blood, (d) ill-health in a mouse, in consequence of infective disease, in which, as was well known, digestive activity was depressed, hindered the growth of cancerous tissue when inoculated. The active agent in inducing the protection, mentioned under (c) was the corpuscles, injections of serum having no effect. On the contrary, the growth of cancer in mice had not been inhibited by inoculating the cancerous tissues or the blood of other species.

They had found that the protection conferred by the spontaneous absorption of tumours which had grown for a time was most efficient against subsequent inoculations of tumour tissue from the same strain as that which had been absorbed. The protection was less for tumours of a different strain, and might even be wanting. The degree of protection against any one strain of tumour was pro-

portional to the amount of that tumour which had been absorbed.

Mice which apparently had been completely protected against the inoculation of cancer had developed the disease spontaneously. Their methods for protecting mice only prevented the grafts from taking, and did not hinder growth once the grafts had taken and organic union with the host had been established. The fact that cancer had developed spontaneously in animals completely protected against the inoculation of grafts pointed to the probability that the organic union between the tumours and the animals attacked was established from the very beginning of the disease. Satisfactory evidence was still wanting of the existence in the serum of protected animals of substances directly harmful to the cancer cell.

Serious attention had been given to the additional alleged cancer cures which had been brought to their notice during the past year. Unfortunately, it was impossible to assign a curative value to any of them. It was desirable from a public point of view to allude specifically to one alleged remedy for cancer which had been tested last year and had again been subjected to renewed tests. This alleged remedy—trypsin alone or in conjunction with amylopsin or as pancreatic extract, in which trypsin, as such, was absent—had received a quasi-scientific basis by the assertion that its employment had cured two mice inoculated with Jensen's carcinoma. When the assertion was made, its validity was carefully tested on mice with rapidly-growing tumours. The large number of observations then made showed that the cures claimed were based on fallacies inseparable from so small a number of experiments. The reinvestigation of this alleged remedy, with the modifications since suggested, had shown that it was incapable of curing mice of inoculated cancer or of influencing the progressive growth of tumours.

In the course of their investigations they had had to employ animals which had suffered from cancer, but had been freed from the disease by means other than spontaneous disappearance. The only means whereby they had been able to effect this object had been by the surgical removal of the tumours. This procedure had proved itself efficacious when properly carried out, both in animals in which transplanted tumours were growing, and in animals spontaneously affected with the disease.

HONORARY TREASURER'S REPORT.

The report of the Honorary Treasurer for the year ending June 24th, 1907, stated that in August, 1906, the Fund was increased by a donation of £1,000 received through His Royal Highness the President from an anonymous donor. This was followed in December last by the munificent donation of £40,000 from Mr. and Mrs. Bischoffsheim on the occasion of their golden wedding.

The amount in donations and subscriptions received during the year, apart from the Bischoffsheim Fund, was £3,515 11s. This compared favourably with the amount (£2,315 2s.) received during the year 1905-6. Special reference was made to the gift of £600 received through Sir Samuel Wilks, Bart., F.R.S., a past President of the Royal College of Physicians, who took a keen interest in the work; also to the gift of £500 from Miss Black; and to the sum of £120 from the Government of Hong Kong, which represents the subscription of £30 per annum for the years 1904-7 inclusive which was obtained through the good offices of the Governor, Sir Henry A. Blake, G.C.M.G. In addition to several fresh donors of varying sums, eight new annual subscribers had been added to the list this year, one of whom was the Worshipful Company of Carpenters. This was the first City company to become an annual subscriber. The Worshipful Company of Pewterers had, however, given a third donation. At the present time there were eighteen annual subscribers. Besides these, the list of contributions showed sixteen donors of two donations each, twelve of three donations each, eleven of a fourth, three of a fifth, and two of a sixth donation each. Three sums of £100 each and one of £90 had been received; also two of 50 guineas, one of £51, and six of £50, two of £25, six of £20, nine of £10 and upwards, and nineteen of 5 guineas or £5. Various amounts from 4 guineas to the widow's mite of 1s. went to make up the total. It was stated that the

Executive Committee had recently felt itself enabled to make an increase in the salaries of the original members of the staff amounting in the total to £250 per annum. The Fund was still deficient to the extent of nearly £13 000 on the estimated amount required to provide a sufficient and permanent income from invested capital.

Sir WILLIAM CHURCH moved the adoption of the report.

Sir HENRY R. SWANZY, in seconding the motion, said the thanks of all were due to Dr. Bashford and his assistants for the sustained, well-directed, and skilful efforts made by them to solve the many problems surrounding the subject of cancer. Substantial progress was being made, and a confident hope might be entertained that the time would come when they would understand the nature and cause of cancer, and also find a cure for it. One fact brought out by the report was that experimental research was necessary for the elucidation of many of the obscurities which surrounded cancer. It was most important that the general public should recognize the fact that there was a body of opinion opposed to this method, which, if it were to prevail, would frustrate the object the Imperial Cancer Research Fund had in view—an object which must be one near to the heart of every right-thinking man. The Royal College of Surgeons of Ireland, over which he had the honour to preside, was deeply interested in this Fund and in its work, and had the utmost confidence in it. They believed that nothing which scientific skill could devise was being omitted to solve this problem.

The resolution was carried unanimously.

Sir JULIUS WERNHER proposed a vote of thanks to the Chairman and members of the Executive Committee, the Subcommittees, the Honorary Treasurer, the Secretary, Auditor, and others who had assisted in the work of the Fund during the past year. It was sometimes said that the work of the Fund was, perhaps, slow; but very few people recognized the nature of the scientific difficulties which had to be surmounted.

Mr. H. L. FLORENCE seconded the motion, which was unanimously agreed to.

THE BISCHOFFSHEIM DONATION.

Mr. HENRY MORRIS next moved:

That the General Committee desire to place on record their deep sense of gratitude to Mr. and Mrs. Bischoffsheim for their recent munificent gift of £40,000, which, together with Mr. Bischoffsheim's original donation of £5,000, will do so much towards placing the Imperial Cancer Research Fund on a secure financial basis.

Amidst the difficulties and disappointments which surrounded the starting of the Cancer Research Fund, three donations, or promises of donations, were the means of giving much-needed encouragement to its promoters. These donations were each of £5,000, by the Worshipful Company of Goldsmiths, Messrs. Wernher, Beit, and Co., and Mr. Bischoffsheim. Mr. Bischoffsheim's £5,000 had nearly as much power in bringing the Fund into existence as this recent gift of £40,000 would have in putting it on a sound and permanent foundation. He added that in a letter regretting his inability to be present, Mr. Balfour, who was one of the Vice-Presidents of the Imperial Cancer Research Fund, stated that the regret was rendered more acute by the fact that, as he understood, a vote of thanks was, on that occasion, to be passed to Mr. and Mrs. Bischoffsheim for their munificent gift of £40,000, and that it would have given him peculiar pleasure to have taken a share in any proceedings designed to express gratitude for this piece of splendid liberality.

Sir CHARLES MORRISON BELL seconded the motion, which was passed unanimously.

On the motion of Dr. ROSE BRADFORD, seconded by Mr. LUDWIG NEUMANN, Mr. Watson Cheyne was re-elected a representative of the General Committee on the Executive Committee; and on the motion of Mr. BUTLIN, seconded by Sir JOHN MCFADYEAN, Sir John Tweedy was elected a member of the General Committee.

Sir R. DOUGLAS POWELL, in proposing a vote of thanks to the Prince of Wales for presiding, referred to the great interest which His Royal Highness had shown in the Fund from its foundation. His continued interest was a great encouragement to the Executive Committee and to the officers engaged in research work, and also an assurance to the public that any efforts which achieved success would at the earliest moment be applied to the practical

relief and prevention of this very dire disease which affected so many of the public.

Mr. EDMUND OWEN, in seconding the motion, remarked that the presence of His Royal Highness in the chair set the seal upon the past year's work of the Imperial Cancer Research Fund. It was a proof to the public, if proof were needed, that the work of the Fund was worthy of their trust, of their hope, and of their generous support.

The motion was passed by acclamation.

SPEECH BY THE PRINCE OF WALES.

The PRINCE OF WALES, in reply, said it was a great pleasure to him to have been able to preside at the meeting. He had been much interested in listening to Sir William Church's remarks on this year's report of the General Superintendent. They had every reason to be satisfied with the growing confidence of the public in the work of the Fund. This was evident from the wide development of its investigations, in which workers in all parts of the world were now taking part; from the endeavours which were being made in France, Belgium, Scandinavia, and the United States to organize similar investigations; and last, but not least, by the munificent donation from Mr. and Mrs. Bischoffsheim. The broad lines of inquiry undertaken by the Imperial Cancer Research Fund had, they felt certain, influenced the whole nature of investigation at home and abroad. It was recognized that the work was conceived and carried out in a liberal spirit; that whatever facts were ascertained were immediately made known to every one; that the material was freely placed at the disposal of all qualified to use it to good advantage; that their staff was not working for its own ends, but with a whole-hearted desire to help on a solution of the problem. From the General Superintendent's report they might gather that the result of the research had been to leave behind various vague issues which it was necessary to investigate in order to clear away doubts and to narrow down the issue to a certain definite line of investigation, in which the clue to the nature of cancer must be sought. Although many new facts had been ascertained they did not as yet justify hopes of a new treatment. Good progress was being made in a scientific sense, which was, after all, the object of the work, and as scientific research must be sure and accurate so must it be laborious and slow. It was hoped, therefore, that the public would continue by its sympathy and financial assistance to support the work of the Imperial Cancer Research Fund, and be willing to exercise the patience necessary for prolonged and systematic investigation. Compared with other diseases, cancer had, alas! such peculiar terrors of its own that impatience for the discovery of the cause and of successful treatment was only natural. But the fact that alleged cures were being submitted to impartial tests, such as the report showed to have been done in the case of trypsin, would, he hoped, assure the public that everything would be done to take full advantage of any means that might be discovered to alleviate suffering. Another tribute to the success of the efforts of the Fund was the number of applications from skilled investigators to take part in the work. Thanks to the liberality of the Royal Colleges, further accommodation had been placed at the disposal of the General Superintendent, and he had, therefore, been enabled to add materially to the staff.

His Royal Highness concluded by expressing his thanks to the chairman and members of the various committees, Dr. Bashford, and the officers of the Fund for the valuable and untiring services which they had given during the past year to the work of the Fund.

THE authorities of Clayesmore School, Pangbourne, Berks, imbued with the spirit of the system adopted by the Admiralty for entrance into the Naval College, intend in future to award four scholarships—two major and two minor—after an examination conducted, not on the ordinary specialized or academical lines, but designed to test the general intelligence, interest, and alertness of the candidates. They will be subjected to a simple written examination, and will then be interviewed by the Board of Examiners, who will have before them reports from former masters and tutors. The object of the scheme is to get rid of the mere examination test and so to free the preparatory schools as far as possible from the rigid system of education which they must at present follow in preparing boys to enter a public school.